



North Carolina
Geographic Information Coordinating Council
Local Government Committee

MINUTES
LOCAL GOVERNMENT COMMITTEE
March 13, 2019, 2:00 PM

PROCEEDINGS

The quarterly meeting of the Local Government Committee (LGC), a committee of the Geographic Information Coordinating Council (GICC), was held on March 13, 2019.

PRESENT

LGC members:

Tom Bell, Western Piedmont COG, NCARC
George Brown, Alexander County, NCLGISA
Jason Clodfelter, MapForsyth, NCLM
Robin Ethridge, Dare County, NCPMA
Alice Wilson, City of New Bern, NC-APA

Others:

Stephen Dew, Metadata Committee and Working Group for Orthoimagery and Elevation
Wright Lowery, Wake County, Hydrography Working Group
David Nash, City of Fayetteville, Working Group for Census Geospatial Data
Jeff Brown, CGIA, Staff to the LGC

Absent members:

Debbie Brannan, Cabarrus County, GICC
Wayne Brewer, City of Raleigh, CURISA
Ben Strauss, Wake County, NCACC

WELCOME

Jason Clodfelter called the meeting to order and welcomed members and representatives.

MINUTES

The Minutes from the November 28, 2018 were approved as submitted.

GICC TOPICS

ATLAS Project

Jason reported on topics from the February 13 GICC meeting. The technical presentation was given by Ryan Arthur of NC Department of Transportation (NCDOT). Jeff Brown summarized the content (also distributed to LGC prior to the meeting):

- Project ATLAS (Advancing Transportation through Linkages, Automation and Screening) got started in August 2017 when the Environmental Analysis Unit (EAU) at NCDOT requested help from the GIS Unit.
- The EAU has heavy GIS users for predictive modeling, field verifications, and impact maps.
- The focus is on transportation project development and environmental analysis. The goal is to streamline project development by utilizing GIS tools, applications, and data. Accelerated project delivery enhances North Carolina's economic competitiveness.
- The GIS-specific business goals are to:
 - Provide the transportation project community a searchable gateway to all spatial data used in project delivery at NCDOT.
 - Create a tool that screens transportation projects against geospatial project data for significant impact areas.
 - Provide a platform for project managers to view their project, their project's impacts, and other significant information related to managing that project.
 - Stand-up an enterprise GIS database for NCDOT project data.
 - Create enterprise GIS data for project delivery.
- The ATLAS project catalogued data amounting to 563 data layers from 27 sources, including NCDOT's GIS Unit, US Geological Survey, CGIA, NC Department of Environmental Quality (DEQ), US Department of Homeland Security, and US Army Corps of Engineers.
- ATLAS is pulling web services from the sources to get the latest versions available, not downloading files and risking use of out-of-date versions. In addition, the ATLAS project is creating 130 new geospatial datasets. Of most interest to the GICC is a new hydrography dataset, but there may be other data layers that will be suitable for public access, to be determined. Access may be authenticated by NCID.

Wright Lowery explained that, for the new hydrography, ATLAS is using elevation data and modeling along with field determinations of stream origins to map headwater streams. This accounts for more streams than were mapped many years ago from topographic maps. Work in a pilot area has been presented to the Hydrography Working Group, including estimates of labor required for the processing stages.

2022 Reference Frame

Jason commented that Gary Thompson, NC Geodetic Survey, presented information about the new datum to the GICC and also did a presentation at the NC GIS Conference. After the GICC meeting, Gary asked Jason for comments from the LGC regarding the potential impacts of the 2022 datum change to local governments. Jason distributed the draft paper from Gary to LGC members. He compiled comments into a document sent to LGC on March 12, and he invited more comments from LGC. He urged LGC members to consult with people in their jurisdictions for now, and Jason will check on plans for wider distribution and feedback. Jason added that Gary will meet with the National Geodetic Survey to discuss state plane coordinates.

Working Group for Enhanced Emergency Response

This is a new working group, emerging from discussions in LGC, presentations by Alice Wilson, Josh Norwood, Richard Tuinstra and others to the GICC and the NCGIS Conference, and recognition of needs for GIS assistance in emergency response in local governments with lesser GIS capacity. State agencies will work to find more ways to collaborate and share data. The charter was sent to LGC yesterday. Local government representatives will be Jason, Alice, and Sallie Vaughn (Person County). Other local government participants are welcome. The kick-off meeting will take place on April 8.

Alice recommended outreach to universities to take advantage of research projects and resources related to natural disasters, response and recovery. There may be opportunities to engage students in GIS efforts in response to events as well.

GIS Volunteers / Municipalities and Counties in Need

Alice pointed out uneven GIS capacity across the state. This relates to emergency response as well as daily operations. Before an event, providing help on maps and applications could be ready to use in an event. From the LGC meeting minutes last November, “Jason and George envisioned a database with resources and regional representatives to be points of contact. A jurisdiction in need should be able to make one phone call to request specific assistance. People identified for certain tasks and topics, not engaged in an emergency operations center, should be able to respond in coordinated efforts.”

SURVEY ABOUT PUBLIC ACCESS TO INFRASTRUCTURE DATA

Jason updated the committee on the survey about public access to infrastructure data. The purpose was to learn about local government geospatial data for infrastructure—public water and sewer and electric power—and related practice and policies regarding public access to the data. Jason distributed a report to LCG in January and he shared it with the Chair of the GICC and the SMAC Chair in February. The survey had 63 responses. In brief, the majority had geospatial data representing infrastructure, the majority did not provide public access, and written policies or data sharing agreement were rare. There were no policy documents received.

Also, Jason and George participated in a panel on the topic at the NC GIS Conference. In addition to their perspectives, Charlotte Water explained its practice in data sharing, with case-by-case vetting. GICC Chair Alex Rankin pointed out a lower risk in sharing data for locations of the distribution infrastructure, for example, for public water. Water supply poses a higher risk if compromised. He also pointed out facilities that are visible on the ground (e.g., hydrants or manhole covers) that indicate the location of underground water or sewer lines.

Also, Jason pointed out that data sharing between local government entities (e.g., public water and GIS) is constrained in many cases.

SMAC is also looking at private companies (regulated by the State as “public utilities”) for data sharing or data access practices and policies. Also, the counsel to the GICC will report to the Management & Operations Committee on April 1st about findings in her research on state and federal statutes, directives, and opinions.

Alice added that data sharing among public entities is important for smart city initiatives that rely on technology and data. The Technical Advisory Committee (TAC) is looking at GIS in smart cities and welcomes more information from LGC members. Jason offered to be a contact for the TAC effort. March 27 is the next conference call to discuss the content of a document on practice. Jason will supply information from Winston-Salem.

NC GIS CONFERENCE

The 2019 NC GIS Conference took place in Winston-Salem, February 27-March 1, 2019. Jason helped host the event. He commented that the conference was informative for MapForsyth. He liked the program format that did not try to sort presentations into common themes and the durations were adequate and kept things moving. He enjoyed the poster session as well. George liked the 5-minute breaks between sessions to make it easier to get from one session to the next on time. Also, the practice of not starting a presentation early was convenient.

Wright did a presentation on the well-collector application. He enjoyed being the only presenter for a 25-minute time slot and being assured of the time allocation. He found that 20 minutes for his presentation content—and five minutes for questions—was adequate and resulted in a more focused presentation.

Tom Bell appreciated being able to view presentation slides on the phone app and Jason heard the same from a colleague.

On the topic of panel discussions, Jason thought the panel on public access to infrastructure data brought out different opinions and generated good audience participation. George concurred and added that the panelists were in agreement that something should be done. Jason added that the panel discussion of what GIS managers are looking for in hiring GIS professionals. Stephen Dew went to the GIS/PLS panel discussion and there was a lot of audience involvement.

Jeff shared some polling results from the NC GIS Conference. Out of 441 respondents, 22 percent indicated they were the one and only GIS person in their department. Regarding years in current position, 25 percent had 15 or more years. Also, 34 percent were in their current position for 1-5 years. Another 17 percent were less than one year; the other 24 percent were in positions 5-15 years. Alice noticed a lot of younger attendees. Stephen pointed out a personnel problem as the large group of the most experienced GIS professionals reach retirement age, and professionals in the middle range of experience make up a smaller group. His experience in Guilford County is consistent with that finding. Jason echoed the situation in Forsyth County where a survey found a gap in middle-range experience. The survey also found 41 percent of respondents engaged one or more contractors for GIS assistance. A question about online public access to GIS data found 64 percent provided access, 25 percent did not, and 11 percent were planning to do so. Jeff commented that about 25 counties do offline transfer of data for NC Parcels.

The City of Asheville and Onslow County were the Herb Stout Award winners for 2019 and the trophy cups have been handed over. Alice was on the review committee for the Herb Stout Award competition and reported that local governments had very few submissions. Jason commented that the poster session at the NC GIS Conference took a lot of reminders to fill spots, and he has noticed difficulty in getting presentations, posters or displays locally for GIS Day. Time constraints were indicated in responses to one of the conference polling questions. Jason also observed GIS professionals may not realize the value of what they are doing, or they may take innovative practices for granted. Stephen added that it might be hard to anticipate what is of interest to the review committee.

Wright added that after his conference presentation on Wake County's two-year-old well-collector app, he was surprised to find a line-up of people waiting to ask him more questions about what was new and interesting to them. Alice suggested online searches for applications and more outreach to potential applicants. Some small GIS shops may not take time to seek recognition that would take time away from daily tasks. It has been hard to get entries in the story map "Are You on the Map?" that has examples of the value of GIS in local governments. Stephen observed that encouragement of projects using software that is not the most widely used (Esri) might generate some participation (e.g., MapInfo). Tom Bell suggested that GIS Professional credit for an entry in the Herb Stout Award competition may be an incentive; the application takes more work than a poster for the poster session that gets credit. Would ranking 1, 2, 3 be a solution for a statewide award, without it being a mere participation trophy.

BRIEF UPDATES FROM COMMITTEES AND WORKING GROUPS

Working Group for Seamless Parcels (WGSP)

Jeff Brown reported that the Working Group will meet on March 28 for an annual check-in and to look at fields in the standard schema that are not well populated and may not be

suitable for publication versions of the data. The spring update will take place in April and May.

Census 2020

David Nash, based on information from Bob Coats, the Governor's Census Liaison, reported that the Boundary and Annexation Survey (BAS) is in progress and is very important for keeping Census geography up to date. A partnership toolbox automates steps and creates an output file. The [Participant Statistical Areas Program](#) (PSAP) is in progress with support from councils of government (COG). This program will give invited participants an opportunity to review and update certain statistical area boundaries (such as census tracts, block groups, and census designated places) for the 2020 Census. Alice added that New Bern and Havelock used the program prior to the 2010 Census. Forsyth County and municipalities will meet with their COG this month. Fayetteville is involved in PSAP, too, with attention to a substitute for traffic analysis zones (not to be published in Census 2020).

The [New Construction Program](#) will give local governments an opportunity to update the Census Bureau's residential address list with residences for which construction is in progress during or after March 1, 2018 and construction completion is expected by Census Day, April 1, 2020. Materials will go out to local governments in September and will be due in November.

The State has a [Complete Count Commission](#) and a [Complete Count Coalition](#). Counties and municipalities are encouraged to set up committees to promote complete population counts in the 2020 Census.

Jason commented that Bob Coats, Michael Cline (State Demographer) and David Cline (Census Bureau) gave an informative set of presentations at the NC GIS Conference.

On the topic of storm-displaced residents and Census 2020, Alice received a response from Bob Coats that the Census approach is to count people where they normally reside. Local governments need to document addresses and track information on damaged homes, homes with building permits for rehabilitation, and houses being demolished. The text of the message from Bob Coats follows:

The Census Bureau's task is counting "everyone, once, and in their usual place of residence." There's a lot that goes into "usual place of residence" with a population that is becoming more and more mobile and the impact of storms dislocating populations.

The Census Bureau is verifying all housing units either through in-house or in-field verification. In areas impacted by Florence, the Census Bureau is interested in hearing specific housing impacts that can guide their verification efforts. For instance, if you know X number of addresses were destroyed and are being rebuilt, Y number are standing but are vacant due to water/mold damage, Z number of temporary housing units are in place, this information will be helpful. It would be even better if you have actual addresses.

If you have this information, please let me know. Time is short for Census operations, but the Census Bureau has asked for documentation that will help them adjust their

operations to get the best counts possible. Local governments in these areas need to work especially hard to inform and encourage their folks to participate the Census in the Spring of 2020.

Orthoimagery and Elevation

Jeff Brown reported that 2019 imagery acquisition is in progress in the Southern Piedmont and Mountains. LiDAR phase 5 of 5 is in quality control and expected to be released by May. Stephen Dew added that Rockingham, Guilford and Randolph are acquiring oblique imagery and flights have been delayed by cloud cover.

Hydrography Working Group

Wright Lowery reported that the group continues to work toward a single streams dataset for water quality regulatory purposes. He consulted with Working Group chair Cam McNutt and confirmed that the Division of Water Resources is reviewing attributes related to the National Hydrography Dataset. ATLAS streams—a combination of headwater streams and surface water from the Floodplain Mapping data—is in review. The group will work on a timeline for the new data after more information from NCDEQ and NCDOT, and the group expects to get more direction from SMAC and the GICC as one of the priority datasets for 2019.

Statewide Mapping Advisory Committee (SMAC)

Alice Wilson reported that most items in the January 23 SMAC meeting have been covered today. She added that highlighted the county mosaics for 2018 orthoimagery are available through NC OneMap, along with the web services and downloadable tiles. NCDOT was due to release quarterly data updates on February 11 for datasets including all NC Roads. On the topic of metadata, NCDOT created a new user guide for editing metadata in ArcGIS that Stephen Dew plans to review and apply in Guilford County.

The Working Group for Land Cover completed its survey and identified two groups of business needs—one set requires the highest resolution data for local government purposes, particularly for delineation of impervious surfaces for stormwater management, and a second set that requires less resolution over larger geographic areas for a variety of purposes. The group needs to get together again to consider a product that would meet a lot of business needs. Wright added that the color infrared imagery acquired by Wake County as a buy-up to statewide imagery has not met all expectation as a source for analysis. He noted that shadows in the imagery interfere with classification and feature extraction, e.g., around trees. Satellite imagery is an alternative, but resolution is lower.

Municipal Boundaries Working Group

Has not met since the last LGC meeting.

Metadata Committee

Has not met since the last LGC meeting.

Roads and Transportation

Has not met since the last LGC meeting.

OTHER ISSUES AND CONCERNS

None.

PROFESSIONAL DEVELOPMENT

The committee discussed upcoming opportunities:

- Carolina URISA is offering the GIS Leadership Academy in Raleigh, May 20-24, 2019. Alice and Jason highly recommend the week-long training.
- Arc User Group announced that Jack Dangermond of Esri will be a speaker at the fall conference in Asheville. Also, a spring symposium will be held March 29.

MEETING DATES FOR 2019

The other quarterly meetings will be held at 2:00-3:30 PM on Wednesdays 2-3 weeks after GICC meetings (May 29, August 28, November 20).

ADJOURNMENT

There being no other business, the meeting was adjourned at 3:30.

LGC's web page on the GICC website:

<http://it.nc.gov/gicc-local-government-committee-lgc>